



SEQUENCE LISTING

<110> Contreras, Roland
Nelissen, Bart
DeBacker, Marianne
Luyten, Walter
Viaene, Jasmine
Logghe, Marc

<120> Drug Targets in Candida Albicans

<130> 53731/000

<140> US//09/857,372A

<141> 2001-09-24

<150> 982204122.0

<151> 1998-12-04

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<170> PatentIn Ver. 2.0

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<213> *Candida albicans*

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<212> DNA

<213> Candida albicans

<400> 8

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ccatagttca gaaaaataaaa ttgaaaaaatt taaaaaaaaa cgcaatatca ttcatttttt 180
ttgttttttt gacaataata ttaatatgta gttaccaatg tttttagatt ttatatgttt 240
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<211> 119

<212> DNA

<213> Candida albicans

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<212> PRT

<213> Candida albicans

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His Lys Leu Glu Asp Glu Thr Pro Ser Ser Ser Phe Thr Arg Thr Asn
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<213> Candida albicans

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Arg	Ala	Arg	Gly	Ile	Thr	Ile	Ser	Thr	Ala	His	Val	Glu	Tyr	Glu	Thr	85	90	95	
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Glu	Ile	Gly	Lys	Glu	Ala	Ile	Leu	Lys	Leu	Leu	Asp	Ala	Val	Asp	Glu	210	215	220	
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Val	Glu	Asp	Val	Phe	Ser	Ile	Ser	Gly	Arg	Gly	Thr	Val	Val	Thr	Gly	245	250	255	
Arg	Val	Glu	Arg	Gly	Val	Leu	Lys	Lys	Gly	Glu	Glu	Ile	Glu	Ile	Val	260	265	270	
Gly	Gly	Phe	Asp	Lys	Pro	Tyr	Lys	Thr	Thr	Val	Thr	Gly	Ile	Glu	Met	275	280	285	
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325 330 335

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340 345 350

Gly Tyr Lys Pro Gln Cys Phe Phe Arg Thr Asn Asp Val Thr Thr Thr
355 360 365

Phe Ser Phe Pro Glu Gly Glu Gly Val Asp His Ser Gln Met Ile Met
370 375 380

Pro Gly Asp Asn Ile Glu Met Val Gly Glu Leu Ile Lys Ser Cys Pro
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420 425

<210> 12

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<212> PRT

<213> Candida albicans

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35 40 45

Asn Ile Asn Asp Lys Thr Ile Val Gln Gly Lys Met Thr Trp Tyr Phe
50 55 60

Gly Arg Asp Pro Asn Ser Asp Leu Gln Val Ala Ser Ser Ser Arg Ile
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Ser Asn Lys His Phe Gln Ile Trp Leu Asn Phe Asn Asp Lys Ser Leu
85 90 95

Trp Ile Lys Asp Thr Ser Thr Asn Gly Thr His Leu Asn Asn Ser Arg
100 105 110

Leu Val Lys Gly Ser Asn Tyr Leu Leu Asn Gln Gly Asp Glu Ile Ala
115 120 125

Val Gly Val Gly Arg Asp Glu Asp Val Val Arg Phe Val Val Val Phe
130 135 140

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Gly	Glu	Ser	Tyr	Ala	Val	Lys	Ile	Ile	Asn	Arg	Arg	Lys	Ala	Leu	Asn	195	200	205	
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Leu	Glu	Arg	Leu	Asn	His	Pro	Asn	Ile	Val	Ala	Leu	Lys	Ala	Phe	Tyr	225	230	235	240
Glu	Asp	Met	Asp	Asn	Tyr	Tyr	Ile	Val	Met	Glu	Leu	Val	Pro	Gly	Gly	245	250	255	
Asp	Leu	Met	Asp	Phe	Val	Ala	Ala	Asn	Gly	Ala	Ile	Gly	Glu	Asp	Ala	260	265	270	
Thr	Gln	Val	Ile	Thr	Lys	Gln	Ile	Leu	Glu	Gly	Ile	Ala	Tyr	Val	His	275	280	285	
Asn	Leu	Gly	Ile	Ser	His	Arg	Asp	Leu	Lys	Pro	Asp	Asn	Ile	Leu	Ile	290	295	300	
Met	Gln	Asp	Asp	Pro	Ile	Leu	Val	Lys	Ile	Thr	Asp	Phe	Gly	Leu	Ala	305	310	315	320
Lys	Phe	Ser	Asp	Asn	Ser	Thr	Phe	Met	Lys	Thr	Phe	Cys	Gly	Thr	Leu	325	330	335	
Ala	Tyr	Val	Ala	Pro	Glu	Val	Ile	Thr	Gly	Lys	Tyr	Gly	Ser	Ser	Gln	340	345	350	
Met	Glu	Ser	Gln	Gln	Lys	Asp	Asn	Tyr	Ser	Ser	Leu	Val	Asp	Ile	Trp	355	360	365	
Ser	Leu	Gly	Cys	Leu	Val	Tyr	Val	Leu	Leu	Thr	Ser	His	Leu	Pro	Phe	370	375	380	
Asn	Gly	Lys	Asn	Gln	Gln	Gln	Met	Phe	Ala	Lys	Ile	Lys	Arg	Gly	Glu	385	390	395	400
Phe	His	Glu	Ala	Pro	Leu	Asn	Ser	Tyr	Asp	Ile	Ser	Glu	Asp	Gly	Arg	405	410	415	
Asp	Phe	Leu	Gln	Cys	Cys	Leu	Gln	Val	Asn	Pro	Lys	Leu	Arg	Met	Thr	420	425	430	
Ala	Ala	Glu	Ala	Leu	Lys	His	Lys	Trp	Leu	Gln	Asp	Leu	Tyr	Glu	Glu	435	440	445	

Asp Ser Val Lys Ser Leu Ser Leu Ser Gln Ser Gln Ser Gln Gln Ser
 450 455 460
 Arg Lys Ile Asp Asn Gly Ile His Ile Glu Ser Leu Ser Lys Ile Asp
 465 470 475 480
 Glu Asp Val Met Leu Arg Pro Leu Asp Ser Glu Arg Asn Arg Lys Ser
 485 490 495
 Ser Lys Gln Gln Asp Phe Lys Val Pro Lys Arg Val Ile Pro Leu Ser
 500 505 510
 Gln His Pro Ala Thr Pro Leu Pro Met Ser Gln Pro Lys Lys Arg Pro
 515 520 525
 Tyr Gln Ile Asp Pro Arg Thr Asn Lys Lys Val Asp Leu Glu Glu Pro
 530 535 540
 Ser Thr Ser Lys Lys Val Lys Leu Ser Asp Ser Val Val Ala Glu Asp
 545 550 555 560
 Tyr Leu Lys Leu Gly Pro Leu Ala Asn Ser Leu Phe Gln Glu Thr Ile
 565 570 575
 Asn Ile Ser Lys Ser Pro Phe Ser Phe Gly Arg Asn Asp Thr Cys Asp
 580 585 590
 Cys Glu Ile Asp Asp Asp Arg Leu Ser Lys Leu His Cys Val Ile Thr
 595 600 605
 Lys Glu Asn Asp Ser Ile Trp Leu Leu Asp Lys Ser Thr Asn Ser Cys
 610 615 620
 Leu Val Asn Asn Thr Ser Val Gly Lys Gly Asn Lys Val Leu Leu Arg
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 Gly Gly Glu Ile Leu His Leu Phe Phe Asp Pro Leu Ser Ser Gln His
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 Ile Gly Phe Lys Val Val Leu Val Asp Gln Ser Ser Gly Glu His Lys
 660 665 670
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 Pro Leu Ile Ser Gly Leu Ser Ser Ile Ser Ser
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<210> 13

<211> 295

<212> PRT

<213> *Candida albicans*

<400> 13

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Arg His Lys Gln Arg Ala Glu Arg Ala Lys Glu Glu Arg Glu Asn Pro	35	40	45
Glu Leu Arg Glu Glu Arg Ile Ala Ala Asn Ile Pro Asp Thr Ile Asp	50	55	60
Ser Lys Arg Ile Tyr Asp Glu Thr Ile Ala Ala Glu Val Glu Gly Asp	65	70	75
Asp Glu Phe Gln Ser Tyr Phe Thr Asn Leu Leu Glu Glu Pro Lys Ile	85	90	95
Leu Leu Thr Thr Ser Ala Asn Ala Lys Lys Pro Ala Tyr Glu Phe Ala	100	105	110
Asp Met Ile Met Asp Phe Leu Pro Asn Val Thr Phe Ile Lys Arg Lys	115	120	125
Lys Glu Tyr Thr Met Gln Asp Met Ala Lys Tyr Cys Ser Asn Arg Asp	130	135	140
Phe Thr Ala Leu Leu Val Ile Asn Glu Asp Lys Lys Lys Val Asn Gly	145	150	155
Ile Thr Leu Ile Asn Leu Pro Glu Gly Pro Thr Phe Tyr Phe Ser Ile	165	170	175
Thr Ser Ile Val Asp Gly Lys Arg Ile Lys Gly His Gly Lys Ala Gly	180	185	190
Asp Tyr Leu Pro Glu Ile Val Leu Asn Asn Phe Asn Ser Arg Leu Gly	195	200	205
Lys Thr Val Gly Arg Leu Phe Gln Ser Ile Phe Pro His Lys Pro Glu	210	215	220
Leu Gln Gly Arg Gln Val Ile Thr Leu His Asn Gln Arg Asp Tyr Ile	225	230	235
Phe Phe Arg Arg His Arg Tyr Ile Phe Arg Asn Glu Glu Lys Val Gly	245	250	255
Leu Gln Glu Gly Pro Gln Phe Thr Leu Lys Leu Arg Arg Met Gln Lys	260	265	270
Gly Val Arg Gly Asp Val Val Trp Glu His Arg Pro Asp Met Glu Arg	275	280	285
Asp Lys Lys Lys Phe Tyr Leu	290	295	

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 <212> PRT
 <213> *Candida albicans*

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 Asn Leu Val Leu Cys Ile Phe Ile Trp Phe Pro Ala Ile Leu His Ala
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 Leu Tyr Val Val Leu Lys Asp
 50 55

<210> 15
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 <212> PRT
 <213> *Candida albicans*

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 Asn Lys Ser Arg Arg Leu Ser Met Asp Asn Gly His Cys Tyr Val Arg
 35 40 45
 Glu Ser Thr Asn Asn His His His Leu Asn Thr Val Val Asp Asn Leu
 50 55 60
 Arg Gln Arg Ala Gly Ser Phe Ser Phe Ile Ser His His His Asn His
 65 70 75 80
 His Gln Asn Ser His Asp Asn Tyr Thr Val Asp Pro Leu Thr Ser Asn
 85 90 95
 Gly Ala Arg Ile Ser Arg Ser Arg Ser Arg Ser Lys Ser Val Gly His
 100 105 110
 Gly Glu Ala Ile Ser Pro Ala Tyr Phe Ser Lys Asn Lys Thr Lys Asp
 115 120 125
 Leu Val Lys Gln Glu Thr Ala His Ile Ile Ser Lys Lys Leu Leu Asn
 130 135 140
 Met Leu Gln Asp Leu Asp Leu Gln Asn Pro Ile Ala Leu Lys Thr Ile
 145 150 155 160
 Ser Gln Gly Ser Glu Ser Lys Phe Cys Lys Ile Tyr Val Ser Asn Thr
 165 170 175

Asn Asn Cys Ile Tyr Leu Pro Ala Ala Ser Ser Thr Ser Phe Thr Tyr
 180 185 190
 Glu Asp Asp Glu Asn Gly Gly Val Ile Ile Ala Glu Asp Arg Asn Asp
 195 200 205
 Glu Met Pro Thr Ala Val Asn Asn Asn Thr Leu Ser Met Asp Ser Ile
 210 215 220
 Asn His Ser Glu Thr Asp Phe Ser Asp Ser Pro Pro Pro Pro Asp Leu
 225 230 235 240
 Phe Ser Lys Met Lys Ser Phe His Ser Pro Asn Tyr Leu Thr Ser Lys
 245 250 255
 Ile Asp Ser Glu Cys Pro Ile Pro His Thr Phe Ala Val Ile Val Glu
 260 265 270
 Leu Thr Lys Asp Ser Leu Ile Ile Lys Asp Leu His Phe Gln Phe Gln
 275 280 285
 Ser Leu Thr Thr Ile Leu Trp Pro Thr Gly Asp Ala Tyr Asn Arg Thr
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 His Ala Lys Glu Lys Phe Thr Ile Gly Asn Met Glu Trp Arg Thr Ser
 305 310 315 320
 Leu Ser Asp Ala Asp Tyr Tyr Ile Asn Ser Ser Asn Ser Asn Asp Val
 325 330 335
 Lys Ser Lys Asn Leu Gly Pro Glu Asp Leu Ile Asn Arg Thr Arg Glu
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 Tyr Lys Leu Ile Asp Ile Glu Glu Pro Asn Asn Ser Ser Asn Ser Leu
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 370 375 380
 Ser Pro Thr Ser Ser Ser Thr Ser Thr Asn Ser Thr Ser Asn Ser Leu
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 Thr Pro Pro Asn Ile Gly Asn Ser Ile Ala Asp Lys Pro Ile Tyr Val
 465 470 475 480

Asn Arg Ile Trp Asn Asp Ala Val His Tyr Ile Ile Thr Phe Pro Arg
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 Lys Tyr Val Thr Leu Gly Cys Glu His Met Ile Asn Val Lys Leu Ser
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 Asp Ser Glu Asp Pro Tyr Cys Ile His Pro Val Ser Lys Glu Asn Lys
 545 550 555 560
 Val Arg Glu Arg Val Val Ser Leu Tyr Glu Leu Lys Thr Lys Ala Lys
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 Gln Ser Ser Gly Gly His Leu Glu Ala Tyr Lys Gln Glu Val Met Lys
 580 585 590
 Cys Pro Glu Asn Asn Leu Leu Phe Ser Cys Tyr Glu Val Glu Asn Asp
 595 600 605
 Asn Asn Asn Gly Asn Gly Asn Gly Asn Gly Asn Lys Asn Val
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 Asn Val Ser Leu Pro Phe Leu Thr Thr Met Ser Asp Ser Leu Ile Met
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 Thr Ser Ala Ile Glu Glu Glu Gly Ser Asp Ser Pro His Thr Ser Arg
 660 665 670
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 675 680 685
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 Ser Ile Asn Glu Ile Gly Asp His Thr Leu Phe Pro Asp Ser Asn Phe
 705 710 715 720
 Arg His Ile Glu Ile Lys His Arg Leu Gln Val Thr Phe Arg Ile Ser
 725 730 735
 Lys Pro Asp Ser Asp Asn Lys Met His His Tyr Glu Val Val Ile Asp
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 Pro Tyr Ser Ser Val
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<210> 16
 <211> 90
 <212> PRT
 <213> *Candida albicans*

<400> 16
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 Thr Cys Ser Ser Cys Gly Tyr Pro Ala Ala Lys Met Arg Ser His Asn
 35 40 45
 Trp Ala Leu Lys Ala Lys Arg Arg Arg Thr Thr Gly Thr Gly Arg Met
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 Ala Tyr Leu Lys His Val Thr Arg Arg Phe Lys Asn Gly Phe Gln Thr
 65 70 75 80
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<210> 17
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 <212> DNA
 <213> artificial sequence

<220>
 <223> Description of Artificial Sequence:primer

<400> 17
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<210> 18
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<220>
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<400> 18
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 <223> Description of Artificial Sequence:primer

<400> 19
tgagcagctc gccgtcgcgc 20

<210> 20
<211> 22
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<220>
<223> Description of Artificial Sequence:primer

<400> 20
gagttatacc ctgcagctcg ac 22

<210> 21
<211> 6671
<212> DNA
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<220>
<223> Description of Artificial Sequence:DNA plasmid

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<210> 22

<211> 7127

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:DNA plasmid

<400> 22

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